Docket No. 1514.1030

## **CLAIMS**

## What is claimed is:

- 1. A thin film transistor (TFT) comprising a lightly doped drain (LDD) region or offset region, wherein the thin film transistor is formed so that primary crystal grain boundaries of a polysilicon substrate are not positioned in the LDD or offset region.
- 2. The thin film transistor according to claim 1, wherein a width of an activation layer including the LDD region or offset region is shorter than a distance between the primary crystal grain boundaries.
- 3. The thin film transistor according to claim 1, wherein the polysilicon substrate is formed by a sequential lateral solidification (SLS) method.
- 4. The thin film transistor according to claim 1, wherein the thin film transistor is used in an LCD (liquid crystal display) or organic EL (electroluminescent) device.
- 5. The thin film transistor according to claim 1, wherein the primary crystal grain boundaries are perpendicular to a current direction between active channel regions of the thin film transistor.
- 6. The thin film transistor according to claim 1, wherein the primary crystal grain boundaries are inclined to a current direction between active channel regions of the thin film transistor at an angle of  $-45^{\circ} \le \Theta \le 45^{\circ}$ .
  - 7. A flat panel display device comprising:

a thin film transistor comprising:

an LDD region or offset region,

wherein the thin film transistor is formed so that primary crystal grain boundaries of a polysilicon substrate are not positioned in the LDD or offset region.

8. The flat panel display device according to claim 7, wherein a width of an

activation layer including the LDD region or offset region is shorter than a distance between the primary crystal grain boundaries.

- 9. The flat panel display device according to claim 7, wherein the polysilicon substrate is formed by a sequential lateral solidification (SLS) method.
- 10. The flat panel display device according to claim 7, wherein the thin film transistor is used in an LCD (liquid crystal display) or organic EL (electroluminescent) device.
- 11. The flat panel display device according to claim 7, wherein the primary crystal grain boundaries are perpendicular to a current direction between active channel regions of the thin film transistor.
- 12. The flat panel display device according to claim 7, wherein the primary crystal grain boundaries are inclined to a current direction between active channel regions of the thin film transistor at an angle of  $-45^{\circ} \le \Theta \le 45^{\circ}$ .